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IN AMERICA

BEE JOURNAL

GEORGE W. YORK,
Editor.

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TO BEE-CULTURE.

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NO. 12.



The North American. — We received from Secretary Benton a long list of names of those who have expressed their intention of being at the Chicago convention on Oct. 11th, 12th and 13th; but it came too late for this number of the BEE JOURNAL. We will give it next week, with other names that may be sent in. It's going to be the biggest and best convention the North American ever held.

Bro. W. P. Root is the very efficient stenographer and proof-reader in the office of *Gleanings*. Some time ago, Bro. A. I. Root purchased a lot of very ancient bee-books (some of them a good deal over a hundred years old), and Bro. W. P. has been reading them and writing condensed reports of what he has read, which reports are published in *Gleanings* from time to time. Although in a few instances some of the old aparian authors knew a thing or two about bees, in the majority of cases it is shown that bee-knowledge in those days was exceedingly limited. Never, in the history of the honey-bee, were the mysteries surrounding it and its management, so well known and understood as they are to-day. The present is a wonderful age, in many ways. How fortunate are the living generations! Do we appreciate our advantages?

Mr. John Hilton, father of Hon. Geo. E. Hilton, was run over and killed by a railroad train on Sept. 5th, near Montgomery, Mich. Mr. Hilton was born in England about 73 years ago, and has been in this country 40 years. Some 36 years ago he settled on the farm upon which he lived at the time of his death. He leaves five sons and four daughters to mourn his terrible death. Our sincere sympathy goes out to the bereaved ones, all of whom we trust will so live that some day they may meet "father" in that eternal home beyond.

Rev. B. D. Luther and wife, of Yellow Springs, O., called at the BEE JOURNAL office last week. Bro. L. combines Presbyterian preaching with bee-keeping, and says they go well together. He reports 117 pounds of comb honey from one colony this year, and that often he secures a crop of honey when his neighbor bee-keepers get none. So much for "knowing how." Bro. Luther is a very pleasant man to meet, is a member of the same Presbyterian synod as Father Langstroth, and has often met Apiculture's "grand old man."

The New York State Exhibit of bees, honey and supplies has been pretty thoroughly advertised in the BEE JOURNAL, in the articles by Mr. Hershiser and Dr. Mason. On page 372 of this number will be found the closing article of the discussion, so far as this journal is concerned, as we do not believe that anything is to be gained by now devoting further space to this subject. Both Dr. Mason and Mr. Hershiser have explained matters pretty thoroughly, and when simmered right down, it mainly

amounts to a difference in the way of looking at things, as we stated on page 296.

As Mr. Hershiser says on page 372, he simply furnished the principal items about the New York State exhibit, which we then used in preparing the editorial on page 137. In again referring to Mr. H.'s data, we see that, in speaking of the space occupied by the exhibit in question, 30x50 feet was the outside measurement of *all* the floor space occupied by the New York bees, honey and supplies, instead of *honey alone*, as we wrongly stated on page 137, when saying, "This enormous exhibit of beautiful *honey* occupies 3½ times the space," etc. Aside from this, we think there is nothing about that first editorial that has not already been corrected by either Dr. Mason or Mr. Hershiser himself.

We are glad to note the good feeling that exists between those concerned in this discussion, and as such is the case, there is another good reason for now terminating it, lest, if continued, good-nature, as well as good-feeling, might become marred. We are satisfied that neither Dr. M. nor Mr. H. intended at any time to cast a single reflection upon any exhibit whatsoever, and we know that we are anxious that all shall receive the utmost degree of credit which is justly due.

Bro. Alley Says, in the September *Apiculturist*, that an abundance of rain had fallen in Massachusetts, and the prospects for a fall honey harvest were very promising. They had a few weeks of dry weather, but not a severe drouth. Here in Chicago we had no rain for over 80 days before Sept. 12th and 13th, when we had several refreshing showers. The fall crop of honey will likely be a minus quantity hereabouts, as the rains came almost too late to do very much good for the bees.

The Number of Bees in a pound, according to Prof. B. F. Koons, of the Connecticut Agricultural College, is 4,832 of average size ones. So he reported in *Gleanings*, after careful weighing experiments. Thus it is pretty safe to say that, in round numbers, there are 5,000 bees in a pound.

Mr. G. W. Nance, of Anthon, Iowa, has sent us a beautiful bunch of golden-rod that his bees just roll in the honey from. It lasts about three weeks.

The Langstroth Fund, contributions to which are now reported in the BEE JOURNAL, we find is mentioned in a very complimentary way in the aparian department of the September *California Cultivator and Poultry-Keeper*. It is also there suggested that another Langstroth fund be raised in Southern California. Why not raise it, and then send it on, to be added to the fund being raised by the BEE JOURNAL? Here is what the above paper says further about the matter:

It is but a duty that we owe to one who has spent years of labor and much money in developing the science, and has been the means of elevating apiculture to the exalted position it now occupies in the scientific world. While we are reaping the benefit of his labor, let us aid in smoothing down his declining life.

Langstroth, though in indigent circumstances, will outlive the millionaire, for

On his tomb the chisel will trace,
Great benefactor of his race.

Mr. C. E. Mead, a bee-keeper with about a dozen colonies of bees here in Chicago, has kindly presented to us a nice section of sweet clover honey. His crop, this year, was about 50 pounds per colony. The dry weather cut it short here, as in many other localities, which will also interfere not a little with the fall honey crop.

World's Fair Notes. — Saturday afternoon is our time to visit the World's Fair, and those who keep track of us pretty closely (Mrs. York, for instance), say that we never see anything but the honey exhibit, no matter how often we go to the Fair. We never have undertaken to disprove their statement, for we do not like to invite defeat, if it can possibly be avoided.

Now, we didn't start out to tell what others have to say of our visits to the Fair, but we did think we would report what progress the aparian exhibits have made, so to the subject in mind.

On Saturday, Sept. 9th, as has become our custom, we took another peep at the bee and honey exhibits, and at the few beesmen that were still in charge of it.

Bro. Cutting expected to have the Michigan exhibit entirely completed by the following Wednesday, which was "Michigan Day." He has been hard at work, and his exhibit shows it. Michigan folks may well

be proud of what he has done for them, and also of the exhibit itself.

The exhibits of Iowa, Indiana, Illinois, Nebraska, Minnesota, Wisconsin and Ohio were all nearly, if not quite, completed.

Dr. Mason, and his pleasant son, Ellis, were there to put the finishing touches on the Ohio exhibit.

Bros. Hershiser and Hastings were rearranging the New York extracted honey exhibit, and also putting in place a number of excellent bee-appliances invented and manufactured by Bro. Hastings.

Bro. Pringle, and his winsome daughter, are still there, looking after the honey exhibit of Ontario. Bro. Pringle had just returned from the Province which he represents, with several hundred pounds of new honey for their already large and fine exhibit. Ontario knows how to "get there" as well as some other folks, when it comes to producing premium honey.

We expect shortly to continue the publication of illustrations and detailed descriptions of the various aparian exhibits. But, of course, to fully appreciate them, they must be seen. Better come before the Fair closes. Only six weeks yet. Come so as to be here on Oct. 11th, 12th and 13th, and attend the meeting of the North American convention. See page 377 for full particulars.

Mr. W. S. Bellows, of Ladora, Iowa, called on us last week. He was in Chicago to attend the reunion of the regiment of which he was a member during our last war. Friend B. is one of the many old and honored veterans that are to be found now in the "ranks" of bee-keeping. We like to think of the old soldiers of to-day as so many "living monuments" that shall remind us of the loyalty and bravery of other and sadder days. Long may they live to enjoy the peaceful fruits of their heroic planting, is our wish.

Fifty-Four Queens by Mail, at one time, were sent to Australia by Bro. Root about the middle of August. He expected that nearly all would reach their destination alive, and in good condition. The business of sending queens half way around the world is now a decided success; not only has Bro. Root been successful in it, but other queen-breeders as well.

STRAY STINGS *From— The Stinger.*

A jolly, good Miller, who once was a "pill-er,"
Has now gone to grinding out "straws;"
In each one so funny, there's a drop of bee-honey,
And none of them have any flaws.

The Stinger has faintly heard a rumor that there will be two more bee-papers started during the next few months. One of them is to be away down in Texas, and the other in far-away California. The former, if it starts at all, is to materialize at the beginning of the new year; the other is to be launched upon a cold, and, perhaps, unappreciative public, the coming October, so the projectors state. The people who have planned these publications don't know what a hard time they have before them when they embark in the bee-publication business. As both enterprises are to be run in connection with the proprietor's supply business, the papers will serve as an advertising medium for the owner's wares. The Stinger does not wish to be understood as desiring to inject any venom into the infant concerns at this early date, but, on the contrary, he wishes the projectors of the forthcoming papers all the success imaginable.

Dame Rumor states that the apicultural journalistic world is soon to have a female at the helm of a bee-paper. The Stinger does not apprehend any furling operations, as long as there is but one woman wielding the pencil and scissors in the field of apicultural publication; just wait until there are a couple of the good sisters in the field, and then the fun may be expected to commence!

It is a long time since a woman essayed to edit a bee-paper in this country. I believe the last, as well as the first, was the *National Bee Journal*, which was in the hands of Mrs. Ellen Tupper. This woman was quite prominent in apicultural circles for a number of years. She wrote extensively upon bee-topics, and did a large business in queen-rearing, I believe. Through loss by fire and financial troubles, she was obliged to retire from business. For a time she was out of her mind, if I remember rightly. She died a few years ago while on a visit to a relative in one of the Southern States—Texas, I think.

California is not a new field for bee-

papers. It is over a decade ago that the first bee-paper was started there; since then two others were sent forth to battle with the waves of the tempestuous sea of journalism, and they had all to succumb after a short existence. Those started in the past were published outside the great honey-producing sections of that State, so there is hope for the forthcoming California bee-paper to do something more than come into life, and, butterfly-like, die in a short time. If any part of the Golden State is by nature the home for a bee-publication, it is Los Angeles. It is in that city of the angels, so the rumor goes, that the new candidate for the favors of the apicultural argonauts is to be born and published. Though the field it will have to labor in is a limited one, and hardly sufficient to support a paper of its kind, still The Stinger hopes that it will be able to realize the most sanguine hopes of its publishers.

How the Stinger would like to get after that Celestial correspondent of the AMERICAN BEE JOURNAL! If I wouldn't puncture him right and left in a way that would out-do the method the said Wung Lung took to cure his fellow countryman of rheumatism, I have lost my cunning. The place to hurt a Chinaman, like almost any one else, for that matter, is by getting at his pocket. But the way I would get at Mr. Wung Lung, in a way that would drive him from keeping bees, is this: I would manage to get his bees crossed with Italians. From some practical experience I have had I know as a fact that Dagos do not like the Celestial "monkeys." Give an Italian a fair chance, and he would fly at a Chinaman's throat. It is for this reason that I think that an Italian bee, which would like to keep up the reputation of its country, would go for the Mongolian in a way that would leave the owner in possession of the field. In making these remarks I do not wish to speak in any way disrespectful of Mr. Wung Lung, who, for aught I know, may be a very excellent gentleman. I have made reference to the matter wholly in the interests of our white bee-keepers, who, no doubt, would like to see the field kept exclusively to themselves.

Please Send Us the Names of your neighbors who keep bees, and we will send them sample copies of the BEE JOURNAL. Then please call upon them and get them to subscribe with you, and secure some of the premiums we offer.



Officers of the New South Wales Bee-Keepers' Union.

On the opposite page we are afforded the pleasure of presenting an interesting group of eight of the most prominent bee-keepers who live in New South Wales, Australia. We are very certain that all of our American readers will be delighted to thus form the acquaintance of their far-away brethren, even though that acquaintance be at very long range. We have a number of subscribers in Australia, as well as in almost every other known foreign land, and we are glad to have the opportunity to see some of them, even if it must be only on paper. Some time we hope to meet them all face to face, though it may never be upon earth.

Without further delay, permit us to introduce you to each one of our Australian brethren, by way of a brief sketch:

No. 1.—The Rev. J. Ayling, Vice-President, started bee-keeping in South Australia in 1858, and for the last eight years he has kept bees rather extensively, his object being to instruct his neighbors in the art, and help them to increase their rather scanty incomes. He uses the Langstroth hive, with Hoffman's frames, and last year he produced about a ton of honey.

No. 2.—Mr. W. S. Pender, of West Maitland, Vice-President, started bee-keeping in 1880, but did not make a business of it until 1889, when he increased to 20 colonies. In 1890 he increased to 40 colonies; in 1891 to 50, in which year he took the first national prize. In 1892 an out-apiary was started in Mulbring, which now numbers 50 colonies. He is assistant editor of the *Australian Bee Bulletin*.

No. 3.—Mr. J. E. Taylor, Vice-President, commenced bee-keeping 15 years ago in Cowra, but pressure of business compelled him to relinquish the pursuit. About seven years ago he made a fresh start, and now has 140 colonies at that

with which firm he has been for the last ten years. He has taken a great interest in bees, and, perhaps, more especially in their homes, having commenced importing bee-hives and appliances from America some years ago. He keeps a



Officers of the New South Wales (Australia) Bee-Keepers' Union.

place, and 150 at his out-aplary at Coota. Season before last he obtained about eight tons of extracted honey, and 1,500 pounds in sections. He uses the Langstroth hive. He secured the second national prize in 1891, and the first in 1892.

No. 4.—Mr. J. Trahair, Treasurer, is manager for Messrs. Hebblewhite & Co.,

small apiary at his private residence, Stanmore, principally for experimenting.

No. 5.—Mr. C. Mansfield, of Largs, who was Secretary of the recent conference in Sydney, N. S. W., has kept bees more or less for the last 15 years, but some years ago it was his good fortune to obtain the original edition of Lang-

stroth's book on bee-keeping, which he read with avidity and delight from cover to cover. Almost immediately he made his first attempt with the bar-frame hive, but he was not at first successful. About five years ago he commenced the work of scientific bee-keeping in real earnest. Finding such an absorbing pleasure in queen-rearing, and being so admirably located for the purpose, his chief attention is devoted to that section of the bee-keepers' art. The famous Ligurian, or leather-colored Italian strain, is exclusively reared. The Hunter River apiary now numbers over 100 colonies, and was awarded a highly commended certificate by the Government, both in 1891 and 1892. He regularly makes importations from Italy for the purpose of maintaining the character of his bees.

No. 6.—Major Shallard, Secretary of the Union, commenced bee-keeping in 1882, at Granville. In 1886 he purchased the Blue Mountain Bee-Farm, at Glenbrook, which contained 160 hives; in 1887 he started an out-apiary at Seven Hills of 200 colonies; in 1888 he started a home depot in Sydney to dispose of his crops; in 1889 he started another out-apiary of 200 colonies, and at present has 850 colonies. He never exhibits at shows, or competes for the national prizes. He was instrumental in starting the New South Wales Bee-Keepers' Association in 1886, and of which he is at present Secretary.

No. 7.—Mr. R. Scobie, M.L.A., President, may be said to have grown up with bees around him, his father having kept black bees on their farm since 1839, when he used to get £5 per swarm for them. He has always taken a lively interest in the bees, but his well-known orchard on the Hunter River has prevented him from doing much active work with them. He was elected President of the Hunter River Bee-Keepers' Association in 1887, and has been annually re-elected since. His father, who is in his 91st year, claims to have been one of the first, if not the first, importers of bees into the colony.

No. 8.—Mr. Albert Gale, Vice-President, is another old bee-keeper, having kept bees in the old straw-skep in Monmouthshire, in 1858. About 25 years ago he kept bees on the Clarence river in gin-cases and boxes, using the old-fashioned 6-pound boxes as a super. From there he moved to the Monaro district some 18 years ago, taking his bees with him, and eight years later he located at Gordon, near Sydney, where

he kept some 18 colonies in Berlepsch hives, which, however, he eventually discarded in favor of the Langstroth. He was appointed apicultural lecturer by the Government in 1889, and has been doing useful work for the bee-industry ever since, his lectures drawing crowds, and embracing the whole colony.

Major Shallard, the Honorable Secretary of the recently formed Bee-Keepers' Union, kindly sent us the photographs of the group of officers, and said that when the association is in "full swing," it will have a membership of about 500. It is the most important society of its kind in Australia. We wish it every success imaginable.

GENERAL QUESTIONS.

In this department will be answered those questions needing IMMEDIATE attention, and such as are not of sufficient special interest to require replies from the 20 or more apiarists who help to make "Queries and Replies" so interesting on another page. In the main, it will contain questions and answers upon matters that particularly interest beginners.—ED.

When to Move the Hives Lower.

I have 8 colonies of Italian bees placed on benches two feet from the ground. I want to place them on the ground, or rather on sawdust. When is the best time to change them, in the fall or in the spring? I think the BEE JOURNAL is the very thing for beginners.

Listonburg, Pa. L. M. LININGER.

ANSWER.—Care must always be taken in moving bees from one location to another, but as you intend to leave your bees on the same location, merely lowering them, no such care is needed, and you can let them down at any time that suits your own convenience. After the hives are lowered, there will be a good deal of confusion among the bees flying around the places where the entrances formerly were, but after a little each bee will settle down to its own hive, that being the nearest to the place it is accustomed to.

Symptoms of Foul Brood.

I have read a great deal in the BEE JOURNAL about foul brood, and it is very important that I should know, while

walking through my apiary, whether my bees have foul brood or not. What becomes of a colony having foul brood? What are the symptoms?

Rodney, Mich. J. W. MILLER.

ANSWERS.—We do not know that any one has ever given a way whereby, in walking through an apiary, you can detect the presence of foul brood. Indeed, those who seem most familiar with it do not seem entirely agreed as to what foul brood is, even when the hive is open before them.

If you find a very bad smell on opening a hive, and then find holes in the center of the cappings over brood, and on opening a cell find the larva rotten, of a dark color, and of aropy character, so that on thrusting into it a toothpick and then withdrawing it, the rotten brood will string out, then you will do well to get out your bee-books and study up on foul brood. A good deal has been said about it on these pages lately.

As to what becomes of a colony having foul brood, if nothing is done for it the general opinion seems to be that it will go "where the woodbine twineth."

Dissatisfied with Their Queen.

On Aug. 10th I placed a queen in a hive, removing the queen then in the same. She was in very poor condition when received, in fact nearly dead, and not one live bee in the cage with her; but I fed her and placed her on the comb, and protected with a "box-lid" cage. On Aug. 14th I released her, and the bees received her. On the 30th, in looking through the hive, I found seven capped queen-cells. These I cut out. I found considerable eggs in the combs. To-day, Sept. 2nd, I find two cells nearly capped. I found the queen, and saw that the last joint of the right hind-most leg was off. The colony is not extra strong. What do you suppose is the matter? I find some sealed drone-larvae, and one cutting away the capping of his cell.

The queen's leg was off when she was received. I then thought it would make no difference. The swarming season has been over nearly two months.

Fair Dealing, Ky. D. L. NELSON.

ANSWER.—Clearly, the bees are not satisfied with their queen. As the queen was nearly dead when you received her, she probably never entirely recovered, and so the bees took steps to replace her. The loss of a leg need not prevent a queen from doing good work.

We have known several five-legged queens, some of them cripples from birth, some of them crippled by accident, but all good layers.



Always Take and Read Bee-Papers.

MRS. ATCHLEY:—After I have taken a bee-paper, and read all the bee-books, and have learned to make a success of bees, could I not just as well leave off my bee-paper? or, of what use is a paper after we have made a success?

SUBSCRIBER.

Friend Subscriber, aren't you joking a little? Now, if you are energetic enough to read the papers and bee-books until you made a success of bee-keeping, you have too much energy to quit reading; you would be a backslider in less than no time, and it would likely take twice the amount of preaching to get you restored. Why, by no means ever think of leaving off that which has brought you up to where you are. I tell you, without the influence of the papers, we would soon run down, surely. I would not do without my bee-papers, if they cost me four times what they now do; and, in fact, I do not know of any kind of a paper but what is worth its subscription price. Stick to your bee-papers, and you will learn more and more, keep posted, and make your bees pay better.

JENNIE ATCHLEY.

Bee-Keeping in Missouri.

MRS. ATCHLEY:—Bees wintered well here last winter; there was no loss with some bee-keepers, while others lost 5 per cent. or less. The spring opened cool and wet. The maple and elm are the first bloom in this State for bees to

work on. This was entirely lost by the long, cold and heavy rains. The fruit-bloom, which comes next, was lost in the same way. Then set in, in earnest, what is known as spring dwindling. Some bee-men lost 50 per cent., while others lost all they had. The only remedy was feeding for two months; where this was neglected, those that did pull through were so weak that they would store no surplus honey.

Heart's-ease, smartweed and Spanish-needle are blooming nicely. These are the best honey-plants we have here.

I began bee-keeping in Effingham county, Ills., in 1849, and sold out there and moved to Putnam county, Mo., in 1853. In 1854 I started out in the old-fashioned log-gum way. I kept bees for pleasure and profit until 1869, when I sold out and moved to this (Bates) county. I went into the bee-business with varied success until 1886, when I sold out again, but did not move away, as I had intended. I bought property in this place, and am likely settled for life.

Last July 4th it was four years since I had cut a large sycamore tree in the Osage river bottom, and got my present start of bees, which consists of 90 fine colonies in all, of four different races. I am dropping all but two—the Italian and Albino. I sent to nearly all the leading queen-breeders, and some that were not, and got from one to twelve queens from each. This has changed my black bees to as fine bees as—yes, I am going to say it—as there is in the United States.

I have used several kinds of hives, but I now use the Gallup hive altogether, with good results. W. A. McGEE.

Rockville, Mo., Aug. 19, 1893.

Bees and Poultry in Bell Co., Tex.

The Belton *Reporter*, of Bell county, Tex., republished the following from the *Texas Farm and Ranch*, about a noted bee-keeper and poultry-raiser in Bell county:

While in the city of Belton, Mrs. S. E. Sherman, known as one of the most energetic, persevering, plucky ladies in Texas, gave me a very hearty and cordial invitation to ride out to the town where she lives, on a visit to her neat little home, which I readily accepted.

Mrs. Sherman's beautiful little home is located in the suburbs. Everything about this home is neatly and tastily arranged. The bee-hives in the apiary

are arranged in beautiful rows with nice walks between them, so that each colony can be easily reached from every side, and every hive is so tastefully painted that the sight is really charming. It was quite a curiosity to me to go from room to room and be introduced to the latest and most improved bee-fixtures, honey-extractors, wax-extractors, hives, frames, and, in fact, everything needed in a first-class apiary.

Seeing how nicely and easily bees can be handled, and seeing them feeding and "clothing" themselves, and laboring so industriously for their mistress, without one word of complaint, made me wish that bees did not have stings, for then I am sure I would pitch into the bee-business up to my eyes.

But Mrs. Sherman's poultry yards had such an attraction for me that my eyes kept turning in that direction, and at last we turned towards them, and soon I was bowing and smiling, and talking to the chickens. The pens were for convenience, health and beauty, the equal, if not the superior of any that I have seen in the State. The White Houdans were indeed a curiosity, as they are the only White Houdans on record. Mrs. Sherman has five pens, including Houdans, White Houdans, White Crested Black Polish, S. S. Hamburgs, and Black Langshans. To these, as well as to bees, Mrs. Sherman is giving the very best of attention, and is making a grand success of both.

The evening was pleasantly spent, and the next morning we drove up on the top of College Hill, where a fine college building is located, and there we enjoyed the beautiful scenery surrounding it. We next drove down to the clear, sparkling river, and there drank from those wonderful springs as fine water as can be found in Texas. These springs are superior to the famous San Pedro Springs of San Antonio. Bell county, taken as a whole, ranks among the best counties in the State. UNCLE SNORT.

Pleased with Half-Pound Sections.

I am very favorably impressed with the half-pound sections. By mistake I bought 5,000 $4\frac{1}{4} \times 4\frac{1}{4} \times 1\frac{1}{4}$ sections, and I have been using some of them. I just place eight of them in a Langstroth frame, and hang them in the upper story. I also use them for side-storing in the brood-chamber, and it works well. The sections sell as fast as we can hand them out at 10 cents each. I

believe I could sell 50,000 of them if I had them now.

The bottom row in the frames of side-storing have more or less pollen in them, but we use them on the table, as we do not object to a little pollen. But the top row contains just as white and solid honey as any sections I ever saw. I use no separators, and my sections are all nice and straight, and weigh just about 9 to 10 ounces when full. I believe I shall try quite a lot of them next season. I know they cost just the same as one-pound sections, but if we have them made to hold just a half-pound, they will bring 10 cents every time in our markets, and 20 cents per pound will make up the double price for the sections. Then, they are so cute, and sell so readily.

JENNIE ATCHLEY.

CONVENTION DIRECTORY.

Time and place of meeting.

1893.
Oct. 11, 12, 13.—North American (International), at Chicago, Ills.
Frank Benton, Sec., Washington, D. C.
Oct. 12.—Susquehanna Co., at New Milford, Pa.
H. M. Seeley, Sec., Harford, Pa.
Oct. 18-20.—Missouri, at Perte Springs, Mo.
P. Baldwin, Sec., Independence, Mo.
Dec. 12, 13.—Illinois State, at Springfield, Ills.
Jas. A. Stone, Sec., Bradfordton, Ills.

In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.

North American Bee-Keepers' Association

PRESIDENT—Dr. C. C. Miller....Marengo, Ills.
VICE-PRES.—J. E. Crane.....Middlebury, Vt.
SECRETARY—Frank Benton, Washington, D. C.
TREASURER—George W. York...Chicago, Ills.

National Bee-Keepers' Union.

PRESIDENT—Hon. R. L. Taylor..Lapeer, Mich.
GEN'L MANAGER—T. G. Newman, Chicago, Ill.

Caponizing, by Edward Warren Sawyer, M. D., Fanny Field, and others. It shows in clear language and illustrations all about caponizing fowls; and thus how to make the most money in poultry-raising. Every poultry-keeper should have it. Price, postpaid, 30 cents; or clubbed with BEE JOURNAL one year, for \$1.10.

The Great Chicago Fire.—No visitor can properly appreciate the Chicago of to-day—wonderful city that it is—without first viewing the city of 22 years ago from the platform of the great Cyclorama Building, on Michigan avenue, near Madison street; see the frenzied flight of the terror stricken multitude, gaze upon the thousands of burning buildings, falling walls, and smoking ruins. The great canvas tells the immortal story of the Chicago Fire more graphically, thrillingly and truthfully than could be done by a whole library of books. Here are some figures to remember:

Number of acres burned per hour, 125.
Number of buildings burned per hour, 1,000.
Number of people rendered homeless per hour, 6,000.
Value of property burned per hour, \$12,-000,000, or a million dollars every five minutes.

Loss, over \$200,000,000.

People homeless, 100,000.

Number of lives lost, unknown.

If all the buildings burned in Chicago were placed end to end, it would make an unbroken row 150 miles long!

Don't miss seeing the "Chicago Fire" Cyclorama when in this city. You will never regret it, once you look upon it.

Bee-Paralysis and the Queen.

In the August *Review*, the editor writes as follows:

When discussing bee-paralysis with Mr. Taylor, this season, he mentioned one fact that goes to show that it comes from the queen. A neighbor called and wanted a queen. Mr. Taylor had none to spare except the one in a colony affected with paralysis. He was going to replace this queen, and told the man he might have her until he could spare some other queen. If she turned out all right, well and good—if not he would replace her. When her bees began to hatch out in the colony to which she was introduced, and to take their places in this work-a-day world, the colony became affected with paralysis.

The Louisiana Hotel is the place where the North American bee-convention will be held on Oct. 11th, 12th and 13th. See the advertisement of the hotel on page 324 of this issue of the BEE JOURNAL. Any of our readers who may be coming to the World's Fair before the convention is held, would do well to "put up" at the Louisiana Hotel. Full information, on page 324.

Have You Read page 357 yet?



Best Covering for Over Frames in Winter.

Query 889.—What do you consider the very best covering for frames in winter, regardless of cost?—IOWA.

Indian-head muslin.—MRS. L. HARRISON.

Quilts made out of burlap.—J. P. H. BROWN.

I believe wood is as good as anything.—A. J. COOK.

Use a straw mat, or some other pervious texture.—DADANT & SON.

Probably a mat made with ground cork, or cork shavings.—EUGENE SECOR.

Enameled cloth, with a good non-conductor on top of it.—H. D. CUTTING.

A sheet of best cotton-cloth, and a 4-inch deep sawdust cushion.—G. M. DOOLITTLE.

I don't know. Possibly a very thin board with a pile of bed clothes over it.—C. C. MILLER.

Burlap, covered with sawdust or shavings to a depth of six or eight inches.—J. H. LARRABEE.

A flat board cover is good enough for me; perhaps a large bag off chaff might be better.—R. L. TAYLOR.

We use a solid honey-board, with straw or chaff cushions over them. We winter our bees on the summer stands.—E. FRANCE.

A cushion of dry, powdered leaves. The point with me is something porous, with outlet in cover for all dampness.—WILL M. BARNUM.

A "duck" spread, with five inches of chaff above. Put four or five corncobs crosswise on the frames, before putting on the spread.—MRS. J. N. HEATER.

An inch board; but it is not always the most convenient. With my method of placing a cake of sugar candy on top of the frames, a cloth and a half dozen old newspapers are better.—EMERSON T. ABBOTT.

Pieces of old rag carpet are as good as anything. Three or four inches of chaff, or dry absorbent of any kind on top of it, makes a nice winter cover. Sealed covers are a failure with me.—C. H. DIBBERN.

A piece of old carpet, with five or six inches of forest leaves pressed in over it. This, if a large entrance is given, will allow moisture to pass off imperceptibly above, retain the heat, and ventilate the hive sufficiently.—J. E. POND.

In this climate (Ky.) a solid board made of soft wood—poplar or pine—put on in time for the bees to glue it tight, over which a second cover goes to keep all dry. A "cloth" will do, but you ask for the best.—G. W. DEMAREE.

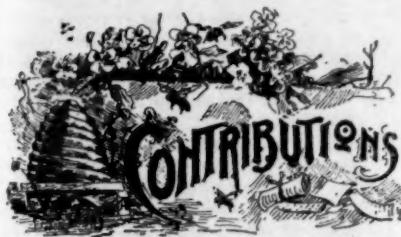
In this country (Texas) common duck, stretched on a board, and one side dipped in melted beeswax. Place on the hive waxside down, and it is not only best for winter, but for all times, as the bees do not eat holes in them.—MRS. JENNIE ATCHLEY.

That depends upon the hive, and whether wintered in-doors or out. Outdoors I should use a quilt cover with a few inches of buckwheat chaff; in the cellar, we use a quilt cover with a board. In a very damp cellar the board might be left off, if the quilt is thick.—P. H. ELWOOD.

I expect that cork shavings is the very best. My plan is to fill the spaces between the frames with strips of wood so as to keep the bees below the top-bars; put burlap over the tops of the frames, and on the burlap three or four inches of dry sawdust. I think that passages over the tops of the frames are worse than useless for out-door wintering.—M. MAHIN.

Late years I have about come to the conclusion that anything which will make the top of the hive air-tight is all right. Enameled cloth or wooden covers made tight with bee-glue during warm weather, and left on undisturbed through the winter, have given good results. Some will tell you that tight covers will be death to the bees, and others just as emphatic that the porous covering will kill them. What would be the very best covering for winter would depend upon what condition the bees were in, where to be wintered, etc.—S. I. FREEBORN.

A Binder for holding a year's numbers of the BEE JOURNAL we mail for only 50 cents; or clubbed with the JOURNAL for \$1.40.



Wintering Bees on the Summer Stands—How to Do It.

Written for the American Bee Journal
BY J. E. POND.

Winter preparation of bees is now in order, and in writing on the subject, I draw solely from my own experience and experiments, and will say in regard to them, that during the thirty years I have been engaged in keeping bees, wintering them only on the summer stands, I have not met with 2 per cent. of loss. The great and only secret in my own locality, where the temperature ranges from 30°, Fahr., above, to 20° below zero, is ventilation, with ample stores so placed that the colony can at all times have access to them. Cold, of itself, doesn't kill bees; lack of stores, and excess of moisture, will kill them every time. If these propositions are true, and I believe them to be so, the question of safe wintering is only a matter of such preparation as will insure plenty of stores and lack of moisture.

I will state briefly my manner of preparation, and the success I have met with is proof to myself that it is the correct one.

I use a 10-frame Langstroth hive, leaving but 9 frames in the brood-chamber for winter use, evenly spaced; each frame being at least $\frac{1}{2}$ filled in its upper part with sealed stores. Over the frames I place a Hill's device, or its equivalent, covering the same with a piece of old carpet or other porous material, with 6 or 8 inches of forest leaves pressed loosely down upon this covering. For ventilation, I give the whole entrance. By this means I get downward ventilation, which I claim to be the only true ventilation for a bee-hive. The excess of moisture imperceptibly passes off through the top of the hive, preventing the formation of frost, which frost I believe to be the chief cause of loss. The bees can pass over the tops of the

frames to any part of the hive, and thus gain access at all times to their food.

I have used double and single walled, and chaff hives, and find little difference in them as to loss. In fact, I have wintered 4-frame colonies, in hives made of $\frac{3}{4}$ -inch stock, with safety.

I believe the above ideas to be correct in theory, and I have proved them to be so, year after year, in practice, and have no hesitancy in advising all who winter bees on the summer stands to adopt them, unless they have some simpler and safer plan of their own.

North Attleboro, Mass.

Something About Utah and Her People.

Written for the American Bee Journal
BY E. S. LOVESY.

Of late I have been asked many questions by bee-keepers, concerning Utah and her people, and some of the queries, to say the least, are somewhat amusing. Some of the writers, after stating that they had read with much interest the little that I have written for the BEE JOURNAL, express a strong desire to hear something more of our country. To show the peculiar ideas held by many of the people in the East, in regard to this country, among the questions I have been asked, are the following:

Is polygamy practiced in Utah now? Do bishops take other men's wives from them? How many wives can a man have? Do they all live in the same house? Do they live in peace? When a man dies, can the widow marry again?

Well, really, I might ask, what do you take us for? It reminds me of an incident that occurred here 30 years ago. In 1863, some California emigrants were passing through this city. A little girl and her mother were on the main street viewing the sights; with some astonishment the girl exclaimed, "Ma, where are the Mormons?" The lady answered, "Why, my dear, these people you see on the street are all Mormons." With surprise the girl replied, "Why, papa said that the Mormons had horns on them!"

This was bad enough 30 years ago, but now, at this late date, I sometimes wonder where we are drifting. It seems to me that we ought to have grown and progressed into more enlightened ideas ere this. If I were asked the above questions by people in Asia, I would not feel surprised, but it does seem strange that

so many of our own people will believe a sensational story rather than listen to reason.

In regard to the polygamy question, it has always been more of a bngaboo in people's imaginations, than anything else. While people were free to practice it or not, they never kindly took to it. I never knew a time in the last 30 years that more than 5 per cent. of the people practiced it, and when the church and the people voluntarily abandoned it in the fall of 1891, I do not think there was one per cent. of the people that practiced it.

Of course, if a man died, if he left one or more wives, they were free to marry again. They did not have to wait until he died; if they were not satisfied, they could get a divorce and marry again. Some do this even now, when there is no polygamy, but they are few and far between. If people marry for love, and are kind and sincere in their married life, they need no divorce, as they live above the law. The people here seem much relieved, now that they are rid of this question. There have been a few rabid agitators that have kept the country in a perpetual boil or ferment, but it is pleasant to reflect that their occupation is gone; and as the people in Utah are sociable and industrious, the more they become known the more they will be appreciated.

In answer to the question whether more than one wife lived happily together in the same house, I can say that I have known several instances of the kind, where they lived happier than the general run of people with one wife; but in some instances it was the opposite. Could you expect it otherwise? As it is not natural, therefore it did not always bring happiness in the home. Some people say that the people here are not happy. This is incorrect. They have as much cause to be contented and happy as any people. There are more people here who own their own homes than in any other place in the Union. We do not have very many rich people, neither have we many very poor folks.

All over Utah, as the people came here and settled the country, each valley and stream was surveyed, and an estimate made as to how many families could live on, or occupy, the land and water. Each family received 20 to 25 acres, and the people each took their pick to the limited amount until the whole of it was occupied. Through this system being inaugurated, most of the people own their own homes. This is one reason why the people of Utah, if

they are not moderately happy, ought to be. Many places are bought, sold and exchanged, and there is some land that is not settled yet. As a rule, the land is fertile, and the climate good. In the north, the soil is good for grain and roots, and in the south tropical fruits can be grown.

The authorities of the Mormon church, and the great Mormon choir, start to Chicago this week, to attend the World's Fair, and to compete for the grand musical prize of \$5,000, which is offered by the Fair. I think it is possible that this trip will be productive of some good—it may have a tendency to dismiss some prejudice that may still linger in the minds of some people, and perhaps, after a while, some of the people may be led to believe that those who live in Utah are not so barbarous a lot as they have been led to believe we are. Many people are astonished when they come here, and visit the large tabernacle and hear this choir. They are very cheerful and pleasant people. There is another good choir of 1,000 young people led by the same leader, Mr. Evan Stevens.

Salt Lake City, Utah, Aug. 29, 1893.

The Cure of Foul Brood Still More Fully Explained.

*Written for the American Bee Journal
BY WM. M'EVoy.*

In the honey season of 1875 I took out the diseased combs, and let the bees build new combs in many colonies. In some of these it was a successful cure, and in others it was a complete failure, although they were all done at the same time. The honey-flow was good at the time, and the bees made combs very fast, and soon had larvae in them. *The colonies that were bad when I took the diseased combs from them were the ones that it failed on.* I then let the bees build combs for four days, and then took them away, and let the bees build new combs the second time; *in every case this made a complete cure.*

In the AMERICAN BEE JOURNAL of Sept. 7th, page 307, under the head of "Some Hits and Misses," I saw a big mistake about half way down the column. It reads: "The colonies that were not bad when I took the diseased combs from them, were the ones that it failed on." It should read the colonies that *were bad when I took the diseased combs from them were the ones that it*

failed on. The word "not" spoiled what I was explaining, because those that were not bad were the ones that it made a complete cure of when they were left to build new combs.

Where the bees of an apiary of 25 or 30 colonies are in a horrid state with foul brood, and the bees are put in empty hives to build their own combs in the time of a big honey-flow, it will end in a failure in many of the colonies, because at such times the bees will build combs very fast, and store some of the diseased honey in them, that they took from the old, foul combs when they were removed. So, to make a complete cure in all bee-yards, I order all combs removed at once, and starters of comb foundation given for four days, and at the end of four days they are to be taken out and full sheets of foundation given; which never fails to cure when both the starters and foundation were given to each colony, and all treated at the same time.

Foul brood has been very bad in Ontario, and I am still finding it in large quantities in places where every one thought his locality was clear. In a small town where bee-conventions have been held time and again, I found the worst foul-broody bee-yards I ever saw. I was astonished, after all that has been published on this subject, to see that any sensible men would for one moment nurse a lot of rotten brood of any kind. I blame the professional guessers for the most of this state of things, because they have led the people astray by saying that colonies kept with rotten brood won't sooner or later end in foul brood. That sort of teaching has caused bee-men everywhere to be very careless, and when foul brood breaks out in their bee-yards, it makes a rapid headway, and ruins the whole apiary in a short time, and all other bee-yards near it.

Why don't the professors step to the front and do one useful act, and advise all bee-keepers to keep dead brood out of their hives at all times? Everywhere that I have been in Ontario, I have advised the removal of all dead brood at all times, and explained to the owners that brood after brood rotting in the same cells, and having to consume food mixed with corrupt matter, takes life and ends in foul brood. I have made a big change in public opinion on this, and have many of the best bee-keepers in Ontario on my side on this very point. I have also many letters from the United States saying that I am in the right.

I wish to thank the editor of the AMERICAN BEE JOURNAL very much for

publishing all my articles on foul brood, as it saved me answering all the letters I have received on this question.

Woodburn, Ont., Canada.

How to Prepare the Bees for Safe Wintering.

Written for the American Bee Journal

BY J. H. ANDRE.

From the reports of last season probably more bees perished during winter than any season ever known before, and right here I wish to say that more than one-half of such losses were the result of carelessness. If those few who have sent the idea afloat that it is not so much in *wintering* as it is in *springing*, had advised against autumn carelessness, they would have hit nearer the mark.

During the past seven years I do not recollect losing a single colony. The first thing to do when preparing a colony is to ascertain if there is plenty of honey—not old, granulated honey, but that gathered the present season. In order to secure this, I strive to have all used up in the brood-frames the spring before. This is done by spreading the brood, interchanging frames from one hive to another, etc.

The brood-nest should be in the center of the hive. If any colonies are lacking in bees, I get them of my neighbors by drumming them from the box-hives they intended to brimstone, and right well pleased they are to get the job done, and avoid the brimstone odor in the honey. One colony will build up from two to three weak ones. This should be done from the 1st to the 15th of October in this vicinity. There is scarcely ever any danger in uniting, if smoke is used.

I never feel safe unless each colony contains a pack of bees. One with four quarts of bees may winter all right, but will be so late in building up in the spring that it will store but one-half the surplus, in some localities.

Use either a Hill's device over the frames, or two strips of wood $\frac{1}{8}$ of an inch square, reaching nearly across every frame, with a passage between the strips. Spread a new piece of muslin over the frames. Take a bottomless box, 4 or 5 inches deep, tack on a muslin bottom, leaving it loose enough to sag down, and cover every part of the frames, when the edges of the box rest on the hive.

Fill the box with the muslin bottom

with buckwheat chaff, pressing it down gently over every part of the frames. The chaff should be medium fine, not dust, nor too coarse. A super will answer to hold the chaff and both thicknesses of cloth laid on the frames, but if the muslin is nailed on the box or frame, it avoids a mussy job when examining a colony early in spring, when the chaff must be placed on the frames again. If the chaff is left uncovered except with the cap, and the cap does not fit too tightly, the moisture will pass off better.

Have the hives where the sun will warm them enough to prevent the bees dying from starvation, which is commonly called "freezing to death."

In this latitude the entrance should be left from 6 to 8 inches wide, *in the center of the hive*, except on very cold nights when it may be partially blocked with a little snow, which will melt and run away when the weather moderates.

These rules are for single-walled hives. Double-walled hives I have never used; the reason why, I have already given several times. Bees in box-hives may be wintered by this method, so far as the chaff is required, if several holes are bored in the top of the hive.

Lockwood, N. Y.

The New York State Honey Exhibit at the World's Fair.

Written for the American Bee Journal

BY OREL L. HERSHISER.

I wish to reply briefly to a few of the statements made by Dr. Mason in his answer to my article on page 309.

Regarding the statement in the third paragraph of Dr. M's article, to the effect that the editorial was mine, I beg to state that I simply furnished the *facts and figures*, to the best of my ability, without use of rule or scales. I also furnished the names of exhibitors, and those who were *represented* and expected to send in exhibits, and I believe I made the statement to the editor that all these had *not* sent in their exhibits, but *expected to*, and for that reason were *represented*. I did not write the editorial, therefore it is not mine—only the *facts and figures* of it are mine, and the remark on page 342, that "this was not a case where the crooked was made straight," still has the application there intended.

Regarding the floor space of 30x50 feet also referred to in the third paragraph of the Doctor's article, I would

say, the honey exhibits at the World's Fair are said to occupy the space in the south portion of the east gallery of the Agricultural Building. The exhibition cases are located on this space. The New York aparian exhibit occupies the amount of this space I have mentioned, in the seventh paragraph on page 310. The editor's statement in the second paragraph of the article on page 137 explained the matter thoroughly, and I believe no one can possibly be misled, or get anything but the correct idea intended to be conveyed.

In reference to the amount of comb honey in the New York aparian exhibit, I would say this:

It has been the custom in many first-class expositions, to offer premiums on certain amounts of comb honey. I visited the Toronto Exposition last summer, and there saw several exhibits said to contain 500 pounds each, if my recollection serves me right. It was put up in cases with only sections on one side in view, I believe. The careful reader will observe that Dr. Mason also takes this view of the matter when it happens to help his side of the question. In the tenth paragraph of his article, on page 201, he says: "When I left the World's Fair, Mr. H. D. Cutting had already received about 1,000 pounds of comb honey, which is loaned by Hon. Geo. E. Hilton, of Fremont, for the exhibit. Mr. Cutting expected as much from Hon. R. L. Taylor, of Lapeer, also loaned, and was looking for more comb and extracted honey from other bee-keepers, that had already been shipped, making their *comb honey* exhibit within a few hundred pounds (300 perhaps) of being as large as the New York comb honey exhibit." Without any reflection on the Michigan comb honey exhibit (which is very elegant), I wish to observe that nearly all the comb honey in it is in the regular sized 12 and 24 pound cases, in which the combs on one face of the cases only are shown. I have not taken an inventory, but think there may be from 200 to 400 pounds outside the shipping cases, perhaps more.

It would be a good exhibition of fairness for Dr. M. to measure the New York exhibit with the same yard-stick used in measuring the Michigan exhibit, and not insist on seeing every pound of the New York comb honey exhibit placed in sight, and at the same time declare the honey in cases out of sight in another exhibit to be on exhibition. "Consistency's a jewel."

I do not care to split hairs about this matter, but when in the sixth paragraph

of Dr. M.'s article he mentions 2,779 sections as being the approximate number of sections in sight, it looks very much as though he was not seeking the "approximate" number, inasmuch as he failed to use even and round numbers, and had made an *actual* count. I beg to state that there were, up to a few days ago (since which time we have been re-arranging exhibits, on account of the receipt of many exhibits of new honey), 2,892 sections in sight. This discrepancy of 113 sections may have occurred in Dr. M.'s effort to add, or he may have counted them in the dark.

Again, in the seventh paragraph of Dr. M.'s article on page 342, he refers to the weight of the sections. If the sections in the Ohio exhibit are regular size 1-lb. sections, and weigh less than 15 oz. each, as he admits, and there is no way of explaining such light weight, I should call them very poorly filled. I have just weighed some sections taken from the New York exhibit, that are, as nearly as I could select, as well filled as the average in the Ohio exhibit, and I find them to weigh from 16 $\frac{1}{2}$ to over 17 ounces. In fact, the whole crop of white honey from Mr. Fred H. Fargo, of Batavia, N. Y., amounting to 4,236 sections, weighs, on the average, according to his bill, over 16 $\frac{1}{2}$ ounces per section, and I am satisfied Mr. Fargo is correct in his weights. Mr. F. uses separators, and the sections are 1 $\frac{1}{2}$ inches wide.

Mr. Albert Snell, of Clayton, N. Y., has sent in an exhibit of honey in sections of the same width (in the production of which I think no separators were used), that weigh 18 pounds per 12 sections.

If a whole crop of over 4,000 pounds weighs at the rate of over 16 $\frac{1}{2}$ ounces per section, on the average, it would be expected that many of these sections would be well and perfectly filled. Now, to be fair, I think the cause of the sections in the Ohio exhibit weighing so light, lies in the fact that the sections are narrow, and not that they are poorly filled.

If Dr. M. measures the New York exhibit in the same manner that he does the Michigan exhibit, the statement in the fifth paragraph of the article on page 137, to the effect that New York has on exhibition more than ten times as much comb honey, etc., is correct.

It is hardly necessary to say anything more concerning the space occupied by the New York exhibit. I gave the correct dimensions of our cases in a former article. I am sorry we could not use

our space in the manner preferred by Dr. M., but we did not feel called upon to consult any one as to how we should use it.

I will say right here, that the New York apriarian exhibit is composed of all the exhibits placed in the New York cases; as to whether they are purchased or loaned, makes no difference. They are here to represent the apicultural interests of the Empire State.

I also beg to state that the 6 colonies of bees in the case against the wall are, and *have been*, on exhibition ever since their installation. There are curtains on the front of the case to regulate the light; one or more of these curtains are raised during exhibition hours, or after the visitors begin to arrive, and no one has been refused when seeking to examine the bees. I have been in attendance at the New York exhibit every day, except Sundays, since June 27th, which was very soon after their installation, and, as far as I know, every one desiring to see them has been accommodated. The case sets against the wall, and was built according to my directions.

The fact that the 6 colonies have gathered over 250 pounds of honey since placed in the case, is sufficient evidence that my notions about its construction were not entirely faulty. If I had known that Dr. M.'s heart was so set upon seeing the exhibits in this case from the opposite side, or outside the building, I would have had a perch built out there for him, where he could sit and look in at the entrance where the bees fly from the building. He is the only one that has raised the question and made the claim that the product of the length and breadth of a space is not equivalent to the space enclosed unless such space may be seen from all sides and at all times, as would be inferred from reading the 3rd, 10th and 12th paragraphs of his article on pages 341 and 342. I imagine from Dr. M.'s success in juggling with figures and measurements, that he would have no difficulty in annihilating the force of gravity. He could then support himself in mid-air on the outside, and gaze with much satisfaction in through the apertures where the bees fly from and to the building.

Regarding the width of wood on the sides of the cases mentioned near the close of Dr. M.'s article, I may say that the end-pieces in the cases in the New York exhibit are $\frac{1}{8}$ of an inch in thickness. The end-pieces of the cases in the Ohio exhibit are $\frac{5}{16}$ of an inch thick, I believe. The tops and bottoms of the cases in the Ohio exhibit are also

much thinner than those in the New York exhibit. The wood on the sides of the cases in the respective exhibits are of the same width, hence the projection of the side-pieces at each end on the cases in the Ohio exhibit is $5/16$ of an inch more than the projections of the side pieces at each end on the cases in the New York apriarian exhibit. That $5/16$ of an inch projection, when looking straight at the case, will cover a large defect. If the observer will take the pains to look in around the edges, he will see whether or not there are any imperfections.

I agree with Dr. M. that there are "really more" imperfections to cover in the New York than in the Ohio exhibit. It would naturally be expected that in an exhibit of comb honey in which there are nearly 2,900 sections *in sight*, there would be a greater number of imperfections than would be found in an exhibit of about 500 selected sections; and I am still of the opinion, after looking back of the *projections*, that the New York exhibit contains many more perfectly filled and full weight sections than can be found in the Ohio exhibit.

As I said in a former article, I believe my figures in regard to the amount of our extracted honey to have been too high, and that I made no attempt at absolute accuracy.

In the fourth from the last paragraph of Dr. M.'s article, he claims to have counted the cases in the New York exhibit, and finds 424 showing two sections each, 280 showing three sections each, and 266 showing four sections each. Not one of the items in this statement is correct, and if it is not evidence that his early education in the rudiments of arithmetic is becoming impaired, the discrepancy must be accounted for in some other way, perhaps due to defective "recollection," though not 240 miles away this time.

The correct figures are—443 cases showing two sections each, 295 cases showing three sections each, 255 cases showing four sections each; and 16 cases showing no sections (the latter used in building in corners in such a manner that the sections are not shown); total, 1,009 cases.

I would not be understood as casting a single reflection on another exhibit, for I know that all are worthy and deserving of the highest commendation. I have acted entirely on the defensive in every remark made concerning other exhibits, and have said just as little as I could in justice to myself and the apriarian exhibit of the Empire State. But

I protest against having the exhibit I represent measured from one standpoint, and a comparison drawn with another exhibit from another standpoint; I protest against the publication of what purports to be an absolutely correct count of items, unless it is correct; and to any comparison of weights of sections and projections of side-pieces of cases, etc., unless a full explanation of apparent differences, or apparent similarity, is made.

Dr. M. has never asked my assistance in making an *inventory* of the New York State exhibit, or in weighing sections for his comparisons, although I have been on hand every day, and would have been glad to have given him assistance. If he had asked my assistance, I could have furnished him some *correct statements*, instead of his *misstatements*.

World's Fair Grounds, Chicago, Ills.

[For final reference to the above discussion in the BEE JOURNAL, see page 359 of this issue.—ED.]

Foul Brood Disease—Its Treatment and Cure.

Written for "Gleanings in Bee-Culture"
BY ERNEST R. ROOT

To many of our readers, and perhaps the majority, the rehearsing of much that is old on this subject may seem unnecessary; but as the information that has been gathered during the past seven or eight years, including our own experiments in the treatment and cure of foul brood, have been scattered through many different copies of the bee-papers, it is hard for the beginner and others, who have unexpectedly come upon foul brood, to get at the information quickly. We have already carefully considered the subject under the heading of "Foul Brood," in the "A B C of Bee-Culture;" but as the disease seems to be breaking out anew in many quarters, and many questions are being asked, we will attempt to boil down the best that has been written, including the article in the book, bringing the matter up to the very latest date.

SYMPTOMS OF FOUL BROOD.

Some of the brood fails to hatch. Cappings here and there are sunken and perforated at the center. On opening one of these cells there will be found a dead larva lying on one side of the cell, somewhat shrunken, and of a brownish

color, varying all the way from a light, pale brown to a dark brown. In the more advanced stages the brown is of the color of a coffee-berry after being roasted. In the incipient stages the brown is of the color of the coffee we drink, when greatly diluted with milk. But so far all these symptoms may be present as a result of chilled, overheated or starved brood. But to determine whether it is the real foul brood, run a toothpick into the dead larva and then draw it slowly out. If the matured mass adheres to the end of the pick, about like spittle, and finally the fine thread breaks when the pick is drawn back, it is probably a case of foul brood. With all other forms of dead brood, with perhaps one exception, this ropiness does not appear; but with foul brood it invariably appears.

Now, there is another symptom, and that is, the odor; while not exactly foul, it resembles greatly that from a cabinet-maker's glue-pot; and when the disease is pretty well advanced in the hive, the odor will make itself manifest upon lifting the cover or quilt, even before exposing the brood. If other colonies are affected in a similar way, and the disease appears to spread, it is unquestionably a case of foul brood.

In the above we have referred to an exception where the diseased larvae have a brown color, and yet show the ropiness—a sort of malady that will correct itself, and which is very apt to appear just before the honey-flow during hot weather. It appears very suddenly, and disappears just as suddenly. It is not foul brood, because it does not spread; and, so far as we can remember from our own apiary, it lacks the distinctive foul-brood odor. We wish we knew what it was.

TREATMENT AND CURE OF FOUL BROOD.

We have tried all the medicine, acid, or antiseptic treatments. We have carefully followed the reports as given in the bee-journals for such treatments; but so far we would not advise anybody to place very much dependence upon them. The carbolic-acid (or phenol) treatment is, perhaps, as good as any; but when it is strong enough to kill the germs of *Bacillus alvei* (the scientific name of foul brood) it kills the bees, too; but even then we have found the disease would reappear in from a month to six weeks after its use. It seems to work a temporary cure; but such a cure in the case of foul brood is no cure at all. In fact, it actually does harm, because, if

a more effectual treatment, which we shall give presently, is used, it does away with the *danger* of infection. Now, understand, we do not mean to assert positively that phenol cannot be made to cure foul brood; but our experience and observation convince us that the average bee-keeper had better let it alone.

THE PLAN THAT WE PREFER.

Having satisfied yourself of the presence of foul brood, or even having a suspicion that the disease is in some particular colony, prepare a clean hive containing only frames of foundation. Toward night shake all the bees from the diseased or suspected colony on to the frames of foundation, and place the new hive on the stand of the old one. If possible, the new hive should resemble exactly the old one; otherwise the bees will be confused, and carry the germs of the disease to other colonies. Compel the bees to use up the honey in their honey-sacs in drawing out the foundation. Don't feed for a day or so.

The diseased honey in the honey-sacs will be converted into wax, and the new product will be entirely harmless. The old combs of the old hives should be burned. Do not try to economize by melting up the wax. You will not get enough of it to pay, besides run the risk of spreading the disease all over the apiary. The old hive should be immersed in boiling water for at least 15 or 20 seconds. Splashing boiling water on it will hardly be sufficient. Painting the inside of the hive with a strong solution of carbolic acid may answer; but we know that boiling the hives is effectual. The hive, after boiling, may be used again with perfect impunity, with new colonies.

We would not advise burning colonies. Unless you burn up every bee, the few that escape will get into some other hive and do more damage than the treatment above recommended.

Caution.—Do not handle the infected colonies during the day, or when robbers are nosing around. Do not attempt to satisfy the curiosity of other bee-keepers who would like to see what foul brood looks like, smells like, etc. If you use any sort of brush for brushing the bees off the combs into the new hives, either burn it up or keep it for awhile in boiling water before using it again on healthy colonies. Nothing but an old smoker should be used in working with foul brood. The boards of the bellows may, perhaps, with advantage be painted over with a strong solution of carbolic

acid; but after having rid the apiary of foul brood, burn up the smoker. Disinfect everything where possible, that has come in contact with combs or hives that are infected with the disease, by immersing in boiling water. The hands should be thoroughly washed in water strongly tinctured with carbolic acid, just strong enough so it will not quite peel the skin off the hands. A solution diluted 500 times, or the strength recommended in the phenol treatment, is hardly adequate. We have tested such strength in killing the germs grown artificially in test-tubes, and it seems to have no effect one way or the other.

If you are afraid of foul brood, cut this article out and paste it inside of your honey-house, where you can have it ready for immediate reference in case the disease should ever make itself manifest in your apiary. We have carefully tested personally the method we have recommended above, and know that it is effectual. Allow us to repeat that we have carefully tested personally the acid and medicine, or antiseptic treatment, and have found them practical failures. We are sure that our readers had better not try to experiment for themselves. It would be far better for them to accept the dictum of somebody else who has been through it all.

Medina, Ohio.

Convention Notices.

PENNSYLVANIA.—The next meeting of the Susquehanna County Bee-Keepers' Association will be held at the Jay House, in New Milford, Pa., on Thursday, Oct. 12, 1893, at 10 o'clock a.m. All are cordially invited.

Harford, Pa. H. M. SEELEY, Sec.

INTERNATIONAL.—The North American Bee-Keepers' Association will hold its 24th annual convention on Oct. 11, 12 and 13, 1893, in Chicago, Ills. Not only is every bee-keeper in America, whether a member of the society or not, invited to be present, but a special invitation is extended to friends of apiculture it every foreign land. FRANK BENTON, Sec.

Washington, D. C.

MISSOURI.—The 8th semi-annual convention of the Missouri State Bee-Keepers' Association will be held at Perte Springs (near Warrensburg) Mo., on Oct. 18, 19 and 20, 1893. It is desirable that as many as can possibly make arrangements will be present, in order that the prosperity of the Association shall not suffer in these poor seasons, for want of personal support. The Executive Committee will prepare a program that will give all an opportunity of expressing themselves on the most important subjects now occupying the attention of the bee-keepers of the country. Arrangements have been made with the M. P. Ry. Co., for 1½ fare, certificate plan. Accommodations at the Perte Springs Hotel will be reasonable. Bee-keepers from any State and every State will be cordially welcomed.

Independence, Mo.

P. BALDWIN, Sec.



Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Piping and Quahking of Queens.

I have read on page 281 that reply from James H. Rose, but cannot fully make out just what his belief is. Of course we want to get at the truth of the matter, and if I am wrong in my belief that in the case of piping and quahking one free queen is piping, and others in the cell quahking, ready to come out if the coast was clear, I shall be glad to learn the truth. Of course, this refers to the case in which further swarming is intended, for I think we all know that when no further swarming is intended all the queens but one are dispatched.

Friend Rose says he will not believe as I do, and says, "I have had ten young queens in a hive at one time, not loose and piping, but all quahking to get at each other to reduce the surplus (queens) in that hive." Now please tell us, Friend Rose, what you mean by that. Do you mean those quahking queens were in the cell or out of the cell? And if they were quahking to get at each other, what hindered them from getting at each other?

C. C. MILLER.

Marengo, Ill.

Honey Crop an Entire Failure.

The honey crop here is an entire failure. We had only a little honey dew last spring. The bees have barely sufficient stores for winter.

C. P. DADANT.

Hamilton, Ills., Sept. 14, 1893.

Much Better Crop than Last Year.

I received a copy of the AMERICAN BEE JOURNAL last week, and I am much pleased with it. We have a much better crop of honey this year than last, but a small crop compared to most of the bee-keepers. We had 36 colonies, spring count, and at the approach of swarming I divided, making an increase of one to ten. I also built up the few weak ones I had, and by so doing they were all in good condition for storing when the white clover opened. We got a fair crop from the clover, in fact our whole crop is from white clover, except a very little dandelion honey.

The basswood blossomed in great pro-

fusion; every little tree was bending with blossoms, but we had no rain for several weeks, and the blossoms dried and died. Our bees, I think, worked only one-half day on it. We may get a very little from the golden-rod. We have taken off a little over 1,000 pounds, and I doubt if we have as much more to take off.

MRS. F. T. HALL.
Barron, Wis., Sept. 4, 1893.

Failure of the Honey Crop Again.

Bees in this section have done no good, and I fed mine in August to keep them from starving. I do not suppose there will be one pound to the hive, of surplus honey, this year. This makes the fourth year that this part of the country has had a failure, but none like the present year.

C. A. LEIBRANDT, JR.
Cameron, Mo., Sept. 12, 1893.

Drouth Finally Broken.

The drouth broke here on Aug. 17th, with $\frac{3}{4}$ inches of rain in two days. It is late for fall flowers, but we hope our bees will get winter stores.

G. W. DEMAREE.
Christiansburg, Ky., Sept. 13, 1893.

Less than Half a Crop.

We have to report somewhat less than half a crop of honey (all white). The bees were almost idle from the middle of July until Aug. 20th. They are working on golden-rod now, but don't seem to be making much more than their "daily bread." Judging from present indications, we will have to do considerable feeding for winter stores.

W.M. RUSSELL.
Minnehaha Falls, Minn., Sept. 9, 1893.

North American Convention.—

We have received the following announcement from Secretary Benton:

COLUMBIAN MEETING OF THE BEE-KEEPERS OF NORTH AMERICA.

The North American Bee-Keepers' Association will hold its 24th annual convention on Oct. 11, 12 and 13, 1893, in Chicago, Ills.

PLACE OF MEETING.

A hall for the use of the Convention has been secured in the "Louisiana Hotel," at the corner of 71st street and Avenue B, only a few minutes walk from the south entrance to the World's Columbian Exposition. This hall is large, well-lighted, and in a quiet place.

HOTEL ACCOMMODATIONS.

The "Louisiana Hotel" itself will furnish comfortable accommodations to members at very moderate prices. For a small room two persons pay daily 75 cents each. Larger rooms occupied by two, at \$1.00 per person.

Four persons occupying a room having two beds will pay 50 cents each. Meals can be obtained in the hotel at reasonable rates, or at numerous restaurants in the vicinity. It is best to engage rooms by letter beforehand.

The proprietors of the "Louisiana Hotel" give us the use of the hall free, expecting that all the members, so far as possible, will take rooms with them, and as the prices are moderate, and rooms are neat and convenient, it is but just for all who can well arrange to stop there to do so. For this purpose, address, Manager "Louisiana Hotel," corner 71st Street and Avenue B, Chicago, Ills., stating what priced room is wanted.

RAILWAY TICKETS AND BAGGAGE.

Most of the railways ticket to the Exposition Depot, near which the "Louisiana Hotel" is located, and baggage should be checked to that station, thus avoiding extra charges, as it is about seven miles from the city stations to the World's Fair Grounds. Information as to rates of travel, the time tickets are good, etc., can be obtained of all local ticket agents. From many points—especially from cities having numerous competing lines—excursions will be starting which will permit those who can take advantage of them to go and return at the usual rate for one fare, if not less than that.

FRANK BENTON,
Sec. North American B.-K.'s Association.
U. S. Dept. of Agriculture,

Washington, D. C.

LANGSTROTH FUND.

[For years, bee-keepers have felt that they owed the Rev. L. L. Langstroth—the Father of American bee-culture—a debt that they can never very well pay, for his invention of the Movable-Frame Hive which so completely revolutionized bee-keeping throughout all the world. In order that his few remaining years may be made as happy and as comfortable as possible, we feel that we should undertake a plan by which those bee-keepers who consider it a privilege as well as a duty, might have an opportunity to contribute something toward a fund that should be gathered and forwarded to Father Langstroth as a slight token of their appreciation, and regard felt for him by bee-keepers everywhere. No amount above \$1.00 is expected from any person at one time—but any sum, however large or small, we will of course receive and turn over to Father L. All receipts will be acknowledged here.—ED.]

List of Contributors.

Previously Reported.....	\$20 65
S. C. Stout, Husted, Colo.....	1 00
Bee-keeper, Fresno, Calif.....	1 00
Total.....	\$22 65

Read our great offers on page 357.

Honey & Beeswax Market Quotations.

Rules for Grading.

The following rules for grading honey were adopted by the North American Bee-Keepers' Association, at its last meeting, and, so far as possible, quotations are made according to these rules:

FANCY.—All sections to be well filled; combs straight, of even thickness, and firmly attached to all four sides; both wood and comb unsoiled by travel-stain, or otherwise; all the cells sealed except the row of cells next the wood.

No. 1.—All sections well filled, but combs uneven or crooked, detached at the bottom, or with but few cells unsealed; both wood and comb unsoiled by travel-stain or otherwise.

In addition to this the honey is to be classified according to color, using the terms white, amber and dark. That is, there will be "fancy white," "No. 1 dark," etc.

CHICAGO, ILL.—Comb honey is coming in plentifully—most of it fancy and No. 1 white. White extracted scarce with plenty of inquiry for same. We quote: Fancy white, 16c.; No. 1 white 15c.; fancy amber, 14c.; No. 1 amber, 14c. Extracted, 5@7c. Beeswax slow at 20c. Sept. 14. J. A. L.

CHICAGO, ILL., Sept. 15.—The receipts of comb honey have not been in excess of the demand up to this date. We have yet very little surplus. Prices remain at 15@16c. for the very best grades. Discolored combs and the darker grades generally are slow of sale at about 14c. Our sales, however, are chiefly at 15c. We consider this about the best season of the year for shipping and selling comb honey. It stands transportation better than it will when the cold weather comes, and people buy it in larger quantities than they do later in the fall. Extracted is nominal, some sales being made all the time at prices ranging from 6@7c., with some other dark goods a little lower. Beeswax salable at 22c. We would advise those having honey ready to ship, to send it forward during this month, or early next. R. A. B. & Co.

Sr. PAUL & MINNEAPOLIS, MINN., Sept. 12.—The receipts of honey are quite liberal, especially the last two weeks. A great deal of Wisconsin comb honey has arrived and is in very good condition; this is being sold at 13½@16c.; the lower price being for darker honey, which, however, does not meet with an active inquiry. California 1-lb. sections selling at 14@16c. Two or three carloads of extracted honey have recently arrived, and sold at 6½@7c., there being little or no difference between white and amber as to price obtained in this market. The best season for comb honey is now coming on. S. & A.

CINCINNATI, O.—Demand is fair for extracted honey at 5@8c., with a good supply. Quite a number of small arrivals of nice comb honey found a ready sale during the last few weeks. Demand is fair. The close money market causes slow collections and makes itself felt on the demand of all merchandise, including honey.

Beeswax—Demand fair, at 20@23c for good to choice yellow. Supply good. C. F. M. & S.

BOSTON, MASS.—Fancy white, 16@18c.; No. 1 white, 15@16c. Extracted, white, 7@8c.; amber, 6½@7c. Beeswax, 25@28c. B. & R.

KANSAS CITY, Mo.—We quote: No. 1 white, 16@17c.; No. 1 amber, 14@15c.; fancy dark, 12@13c.; No. 1 dark, 10@12c. Extracted, 6½@7c.; amber, 5½@6c.; dark, 5c. Beeswax, 17@18c. C.-M. C. Co.

KANSAS CITY, Mo., Sept. 14.—Demand is good. Supply light. We quote: 1-lb. comb, 16c.; light weight, 14c. Extracted, white, 7½c.; amber, 6½c.; dark, 5@5½c. Beeswax, 22@25c. H. & B.

NEW YORK, N. Y., Sept. 12.—Our market remains quiet. New comb honey is arriving freely, and the demand is rather light. We quote: Fancy white, 1 lb. sections, 14@15c. Off grades irregular and in no demand. Extracted is selling slow at from 30@35c. per gallon for Southern, and 5½@6c. per pound for Californian. Beeswax dull at 23@24c. H. B. & S.

ALBANY, N. Y.—Our honey market is steady. We quote: White comb, 15@16c.; mixed, 13@14c.; dark, 11@12c. Extracted, white, 7½@8c.; mixed, 7c.; dark, 6@6½c. White extracted honey should be marketed now while there is a demand for bottling, that is not later on when weather is cold and the honey chilled. Beeswax, 25@27c. H. R. W.

CHICAGO, ILL.—We quote: Fancy selling at 16c.; choice, 15c.; No. 2, 13@14c.; poor, 12c. With prospects of a large crop, we advise early shipments to the market. Extracted selling at from 5½@7c., depending upon the color, flavor and style of package, and quantity the buyer will take. Beeswax, 22@24c. We have no stock on hand. S. T. F. & Co.

List of Honey and Beeswax Dealers,

Most of whom Quote in this Journal.

Chicago, Ills.

J. A. LAMON, 44 and 46 So. Water St.
R. A. BURNETT & Co., 161 South Water Street.

New York, N. Y.

F. I. SAGE & SON, 183 Reade Street.
HILDRETH BROS. & SEGELKEN,
28 & 30 West Broadway.

CHAS. ISRAEL & BROS., 110 Hudson St.

San Francisco, Calif.

SCHAHT, LEMCKE & STEINER, 10 Drumm St.

Minneapolis, Minn.

J. A. SHEA & CO., 14 & 16 Hennepin Avenue.

Kansas City, Mo.

HAMBLIN & BEARSS, 514 Walnut Street.

CLEMOMS-MASON COM. CO., 521 Walnut St.

Albany, N. Y.

H. R. WRIGHT, 326 & 328 Broadway.

Hamilton, Ills.

CHAS. DADANT & SON.

Cincinnati, Ohio.

C. F. MUTH & SON, cor. Freeman & Central avs.

Wanted—Comb Honey.

Highest Cash Price paid for same. Address

I. J. STRINGHAM,
12A3t 105 Park Place, New York City.